

# **Decision Report**

# **Application for Works Approval**

#### Part V Division 3 of the Environmental Protection Act 1986

Works Approval Number	W6619/2021/1				
Applicant ACN	Cosla Pty Ltd 644 237 632				
File number	DER2021/000331				
Premises	Cosla Pty Ltd Howell Road MARBELUP WA 6330				
	Legal description – Lot 6767 on Deposited Plan 167638, Marbelup (Certificate of Title Volume 240 Folio 46A) Lot 561 on Deposited Plan 256746, Marbelup (Certificate of Title Volume 1259 Folio 424)				
	As defined by the coordinates in Schedule 1				
Date of report	16 March 2022				
Proposed Decision	Works approval granted				

#### MANAGER, RESOURCE INDUSTRIES

#### **REGULATORY SERVICES**

an officer delegated under section 20 of the Environmental Protection Act 1986 (WA)

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## 1. Decision summary

This decision report documents the assessment of potential risks to the environment and public health from emissions and discharges during the construction and operation of the premises. As a result of this assessment, works approval W6619/2021/1 has been granted.

## 2. Scope of assessment

### 2.1 Regulatory framework

In completing the assessment documented in this decision report, the Department of Water and Environmental Regulation (the department; DWER) has considered and given due regard to its regulatory framework and relevant policy documents which are available at <a href="https://dwer.wa.gov.au/regulatory-documents">https://dwer.wa.gov.au/regulatory-documents</a>.

### 2.2 Application summary and overview of premises

On 1 September 2021, the applicant submitted an application for a works approval to the department under section 54 of the *Environmental Protection Act 1986* (EP Act).

The application is to establish and operate a crushing and screening plant for the processing of gravel material at Lot 6767 on Deposited Plan 167638, and Lot 561 on Deposited Plan 256746, Marbelup (the premises). The premises is approximately 2.9 km northwest of Elleker township.

The premises relates to the category 70 and assessed production capacity under Schedule 1 of the *Environmental Protection Regulations 1987* (EP Regulations) which are defined in works approval W6619/2021/1. The infrastructure and equipment relating to the premises category and any associated activities which the department has considered in line with *Guideline: Risk Assessments* (DWER 2020) are outlined in works approval W6619/2021/1.

## 2.3 Description of proposed activities

#### 2.3.1 Staged operation

Cosla Pty Ltd (the Applicant) is proposing to extract up to 30,000 tonnes per annum of gravel and sand material using a staged approach across an area of approximately 19.9 ha across the premises. In times of high demand, a maximum of 50,000 tonnes per annum will be extracted. Extraction will occur in four stages as shown in Figure 1 below, with sand and gravel material being extracted at the same time over the life of the quarry pit. It is noted that the area labelled in Figure 1 as 'Stage 1 – sand extraction' has been excluded from the Prescribed Premises boundary area as no crushing and screening activities will occur in this area. Crushing and screening will only occur in the areas where gravel extraction is proposed (Bio Diverse Solutions, 2021). Therefore, this area has not been included in the risk-based assessment of this works approval, and the Prescribed Premises area is depicted by the blue line shown in Figure 1.

#### 2.3.2 Site operations process

#### Site preparation

As discussed under section 2.4.3, the clearing of approximately 30 native trees is required for the extractive industry activity within the Prescribed Premises boundary. A clearing permit will be required to remove the native vegetation prior to extraction activities commencing. The top 150-200mm of topsoil will be removed and stockpiled in windrows that are 5 to 8m wide and up to 4m high along the edges of the extraction areas. As illustrated in Figure 1, a 2-4m bund will be constructed along the western and southern boundary of the Premises boundary and parallel

to any excavation areas as a measure to reduce noise and dust emissions.

A stormwater retention area will be installed within the southern end of each staged excavation pit as shown by the pink line in Figure 2. Perimeter bunding constructed from topsoil will be constructed along the southern edge of the staged excavation pits to minimise potentially contaminated stormwater and sediment runoff. The site will be graded along contours towards a swale inside of the bunding area to act as a settling pond by retaining any contaminated sediment laden stormwater runoff from the plant and operational area. Figure 3 indicates the design of the stormwater management infrastructure.

#### **Operational activities**

Gravel extraction will be undertaken in the three staged areas comprising of multiple pits within each stage. Within these paddocks, one of the pits (average of 1ha in size) will be exposed/operated at any given time with topsoil being respread over the pit area followed by site rehabilitation once extraction activities have ceased. The remaining area of the stage will be opened. In times of high demand, one stage within the Premises boundary will be exhausted every 12 months. A mobile crushing and screening plant will be utilised to process and stockpile gravel material, before being loaded onto trucks for transportation to various construction sites within the City of Albany and adjoining areas.

The crushing of large gravel boulders will only occur when required, therefore it is expected that most of the resource extracted from the pits will not require crushing. Gravel material is stored on the pit floor in stockpiles no greater than 4m in height for use as demand requires. Stockpiles of gravel material will be stored no longer than 6 to 12 months. Trucks will enter and exit the Premises via the site entry access point along Howell Road which is proposed to be upgraded as part of the operation. The Premises are proposed to be in operation from 7am to 6:00pm, Monday to Friday, and Saturday's 8:30am to 1pm.



Figure 1: Premises map illustrating proposed stages of extraction.



#### Figure 2: Stormwater management infrastructure at the Premises

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Figure 3: Design drawing of stormwater management infrastructure at the Premises.

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## 2.4 Legislative context and other approvals

#### 2.4.1 Development Approval

The Premises is situated in an area zoned as 'General Agriculture' as defined by the City of Albany's (the City) Local Planning Scheme No.1. The Applicant was granted Development Approval (DA) under the *Planning and Development Act 2005* by the City on 19 April 2021 for the purpose of Extractive Industry (Gravel and Sand) (City of Albany, 2021). The DA is valid until 31 December 2031.

#### 2.4.2 Extractive Industry Licence

The Applicant was issued an Extractive Industry Licence (EIL) on 20 October 2021 by the City of Albany for the extraction of gravel and sand (City of Albany, 2021a). The EIL is valid until 31 December 2022.

#### 2.4.3 EP Act – Native Vegetation Clearing Permit

The proposed activity will require the clearing of native vegetation (approximately 30 native trees) for the purpose of extractive industry. A clearing permit will be required to be obtained under section 51E of the *Environmental Protection Act 1986.* It is the Applicant's responsibility to ensure a clearing permit is obtained from DWER's Native Vegetation Regulation branch (NVRB) prior to commencing any excavation activities. It is noted that the Applicant has applied for a clearing permit (CPS 9501/1) through the NVRB for the purpose of upgrading Howell Road for the proposed operation. The clearing permit application was advertised on the DWER website on 9 December 2021 for a 14-day public submission period. No public submissions were received. The application is currently under assessment.

## 3. Risk assessment

The department assesses the risks of emissions from prescribed premises and identifies the potential source, pathway and impact to receptors in accordance with the *Guideline: Risk Assessments* (DWER 2020).

To establish a risk event there must be an emission, a receptor which may be exposed to that emission through an identified actual or likely pathway, and a potential adverse effect to the receptor from exposure to that emission.

### 3.1 Source-pathways and receptors

#### 3.1.1 Emissions and controls

The key emissions and associated actual or likely pathway during premises construction and operation which have been considered in this decision report are detailed in Table 1 below. Table 1 also details the control measures the applicant has proposed to assist in controlling these emissions, where necessary.

Emission	Sources	Potential pathways	Proposed controls
Construction			
Dust	Placement of crushing and screening plant and	Air / windborne pathway	<ul> <li>Clearing of native vegetation and topsoil stripping will be avoided on strong wind days;</li> </ul>

#### Table 1: Proposed applicant controls

Emission	Sources	Potential pathways	Proposed controls
Noise	associated equipment Vehicle movements on unsealed access roads Earthmoving and clearing of native vegetation activities to prepare site Construction of a 2- 4m bund along the southern and western boundary of the extraction area and parallel to any excavation areas; Construction of perimeter bunding to minimise stormwater entering the site.	Air / windborne pathway	<ul> <li>Clearing of native vegetation to be carried out in stages as the project progresses to reduce dust generation in cleared areas;</li> <li>Restrict vehicle travel speeds on unsealed road surfaces at the site to 40km/hr; and</li> <li>10,000L Water truck to be stationed onsite and used to wet down unsealed access roads and working areas for dust suppression.</li> </ul>
Time limited C	perations and Operati	ion	
Dust	Operation of the crushing and screening plant	Air / windborne pathway	<ul> <li>Water truck maintained on site to water down unsealed access roads, operational areas and stockpiles to minimise dust emissions;</li> <li>Operations to cease during times of strong prevailing winds, when a north- easterly wind is present or if visible dust is observed leaving the Premises boundary;</li> <li>Visually monitor visible dust crossing the boundary of the Premises;</li> <li>A dust complaint register will be located at the front gate of the Premises with signage erected detailing the contact number of the site manager;</li> <li>Construction of a 2-4 metre bund along the western and southern boundary of the Premises boundary and parallel to any excavation areas; and</li> <li>Ensure on-site employees and sub- contractors are educated to minimise dust emissions from all operations.</li> </ul>

Emission	Sources	Potential pathways	Proposed controls
	Unloading, loading and stockpiling of material. Lift-off from stockpiles and/or stored product.		<ul> <li>Stockpiles are not to exceed 4m in height;</li> <li>Stockpiles of material are to be retained on the pit floor of excavation areas and along the edges of pits to minimise dust emissions; and</li> <li>Stockpiles to be configured to accommodate easy access for watering down to reduce dust emissions.</li> </ul>
	Vehicle movements on unsealed surfaces		<ul> <li>Restrict vehicle travel speeds on unsealed road surfaces at the site to 40km/hr; and</li> <li>Truck loads to be fully covered by tarpaulins prior to leaving the Premises.</li> </ul>
Noise	Crushing and screening of material. Unloading, loading and stockpiling of material during processing of material. Vehicle movements on unsealed surfaces.	Air / windborne pathway	<ul> <li>A stripped topsoil 2-4m bund shall be constructed along the excavation pits of the western and southern boundaries of the Premises as a noise screening barrier to offsite human receptors;</li> <li>Quarrying and processing operations are restricted to the daytime hours of 7am to 5pm Mondays to Fridays, and 8:30am to 1pm Saturdays;</li> <li>Mounding of topsoil to be constructed along the edge of extraction pits to reduce noise emissions impacting upon offsite human receptors;</li> <li>Regular inspections of noise bund to ensure noise is contained within the Premises and bunds are of the specified heights;</li> <li>Crushing and screening activities shall remain more than 500m from the closest adjacent residence;</li> <li>Restrict vehicle travel speeds on unsealed road surfaces at the site to 40km/hr; and</li> <li>Crushing and screening plant and associated machinery on site to be maintained through regular inspections;</li> <li>Shut down equipment when not in use;</li> <li>Road trucks and road trains used for transportation of gravel material to be regularly inspected to ensure all muffler and exhaust systems are functioning construction.</li> </ul>
			<ul> <li>A noise complaint register to be</li> </ul>

Emission	Sources	Potential pathways	Proposed controls
			maintained on site with signage erected detailing the contact number of the site manager;
			<ul> <li>Any Noise complaints are to be recorded by the site manager, acted on immediately and resolved within 24 hours from receiving the complaint; and</li> </ul>
			• Ensure on-site employees and sub- contractors are educated to minimise noise emissions from all operations.
Sediment laden stormwater	Operation of the crushing and screening plant Stockpiling of material	Overland and stockpile runoff during high rainfall events.	<ul> <li>2-4 metre high perimeter bunding constructed from topsoil along the southern edge of the excavation pits to minimise any potentially contaminated storm water and/or sediment runoff is contained;</li> </ul>
			• The site will be graded along contours to ensure any contaminated stormwater and sedimentation runoff from stockpiles and the processing plant is directed to the swales for containment;
			<ul> <li>Stormwater swales are to be checked and/or cleaned out following rainfall events (&gt;10mm of rain); and</li> </ul>
			<ul> <li>Inspection of stormwater swales to be conducted on a weekly basis and following rainfall events (&gt;10mm of rain).</li> </ul>
Spills / leaks Hydrocarbon spills Overland of or leaks from vehicle bigh reinfoll		Overland runoff during	<ul> <li>No hydrocarbons, chemicals or fuels to be stored on-site;</li> </ul>
hydrocarbons	and equipment use, refuelling or maintenance activities	high rainfall events. Leaching through soil profile to groundwater	<ul> <li>Hydrocarbons, chemicals or fuels will be transported to site as required by a contained mobile service vehicle that will be equipped with spill kits in the event there is a spill on site;</li> </ul>
			<ul> <li>Vehicles and equipment to be visually checked on a daily basis for leaks or potential oil spills;</li> </ul>
			<ul> <li>Major servicing of vehicles is to occur offsite if required;</li> </ul>
			• In the event of a chemical or fuel spill on- site, the spill management procedure and methodology outlined in the <i>PaWS Spill</i> <i>Management Brochure (DEC 2011)</i> will be implemented to manage the spill; and
			• In the event of a major vehicle breakdown onsite, the spill management procedures outlined in the <i>PaWS Spill Management Brochure (DEC 2011)</i> will be employed and any contaminated soil will be

Emission	Sources	Potential pathways	Proposed controls			
			removed and disposed of at an appropriate location.			

#### 3.1.2 Receptors

In accordance with the *Guideline: Risk Assessment* (DWER 2020), the Delegated Officer has excluded the applicant's employees, visitors, and contractors from its assessment. Protection of these parties often involves different exposure risks and prevention strategies, and is provided for under other state legislation.

Table 2 and Figure 4 below provides a summary of potential human and environmental receptors that may be impacted as a result of activities upon or emission and discharges from the prescribed premises (*Guideline: Environmental Siting* (DWER 2020)).

Human receptors	Distance from prescribed activity
Rural Residential Premises	One rural residential property is located <b>within 1km</b> of the Prescribed Premises boundary:
	<ul> <li>Resident 1: 648m south of the nearest border of the extraction area (Lot 5929 on Plan 162780), Marbelup).</li> </ul>
	Three rural residential premises are located <b>within 2km's</b> of the Prescribed Premises boundary:
	<ul> <li>Resident 2: 1.026m south-east of the nearest border of the extraction area (Lot 5590 on Plan 208107, Marbelup;</li> <li>Resident 3: 1.324m south-west of the nearest border of the extraction area: (Lot 640 on Plan 302070, Marbelup); and</li> <li>Resident 4: 1.279kms south-west of the nearest border of the extraction area (Lot 202 on Plan 63261, Marbelup).</li> </ul>
Environmental receptors	Distance from prescribed activity
Environmental receptors 7 Mile Creek (conservation category wetland)	Distance from prescribed activity           The '7 Mile Creek' conservation category wetland is mapped approximately 275m north of the Prescribed Premises boundary.
Environmental receptors7 Mile Creek (conservation category wetland)Surface Waterbodies	Distance from prescribed activity         The '7 Mile Creek' conservation category wetland is mapped approximately 275m north of the Prescribed Premises boundary.         The Prescribed Premises is located within the 7 Mile Creek Catchment.
Environmental receptors 7 Mile Creek (conservation category wetland) Surface Waterbodies	Distance from prescribed activity         The '7 Mile Creek' conservation category wetland is mapped approximately 275m north of the Prescribed Premises boundary.         The Prescribed Premises is located within the 7 Mile Creek Catchment.         A minor non-perennial tributary is mapped approximately 100m west of the Prescribed Premises boundary. The watercourse flows in a south easterly direction across the site and drains into 7 Mile Creek located approximately 1.6km downstream of the site (mapped 987m east of the Prescribed Premises boundary).

# Table 2: Sensitive human and environmental receptors and distance from prescribed activity

	Solutions noted that the majority of the site has been cleared with the exception of several stands and individual mature trees over introduced pasture grasses, weed species and some bracken fern. The site is currently being used for grazing/agricultural purposes. The vegetation was identified as being in a "Completely Degraded" (Keighery, 1994) condition. This vegetation is located within the extraction area and proposed to be cleared.
	The remnant vegetation located to the north, west, east and the area within Lot 561 is described as Jarrah/Marri/Sheoak Laterite Forest and has been identified as 'Very Good' to 'Excellent' on the Keighery scale (Keighery, 1994) (Bio Diverse Solutions, 2021).
Threatened Ecological Community (TEC)	A mapped occurrence of the 'Banksia coccinea Shrubland/Eucalyptus staeri/Sheoak Open Woodland' ('Community type 14a') TEC is located 298m north-east of the Prescribed Premises boundary. This TEC is listed as 'endangered' at a federal level under the Commonwealth <i>Environment Protection and</i> <i>Biodiversity Conservation Act 1999</i> and 'Priority 1' at a state level.
Conservation Areas	The closest conservation area is the Down Road Nature Reserve (R 20948) vested with the Conservation Commission of WA for the purpose of the 'Conservation of Flora, Fauna and Water' located approximately 74m north-east of the Prescribed Premises boundary.
Priority flora species	According to the Department of Biodiversity, Conservation and Attractions (DBCA) database, the following records have been identified within 3kms of the Prescribed Premises boundary:
	<ul> <li>Lysinema lasianthum (Priority 4) – 2 x records - 2.4km south and 2.8km north-east of the nearest border of the extraction area; and</li> <li>Gonocarpus simplex (Priority 4) – 2 x records - 2.3km northwest of the nearest border of the extraction area.</li> </ul>
	Noting the distance and the cleared agricultural land between the Prescribed Premises boundary to these records of conservation significant flora, the proposed activity is not likely to impact upon the conservation status of the species. Therefore, these environmental receptors are not considered further in the risk assessment.
Conservation significant fauna species	According to the DBCA database, the following records have been identified within 3kms of the Prescribed Premises boundary:
	<ul> <li>Western ringtail possum (WRP) (<i>Pseudocheirus occidentalis</i>) – (5 x records) – threatened – 857m south-west, 972m north-east 1.6kms south-west, 2.2kms north-east, 2.3 north-west, and 2.5kms north-west of the nearest border of the extraction area;</li> <li>forest red-tailed black cockatoo (<i>Calyptorhynchus banksii naso</i>) – threatened - 2.7kms south-east of the nearest border of the extraction area; and</li> <li>Carnaby's cockatoo (<i>Calyptorhynchus latirostris</i>) – threatened - 2.2kms north-east of the nearest border of the extraction area.</li> </ul>
	No detailed fauna surveys have been undertaken within the areas of remnant native vegetation located adjacent to the Prescribed Premises boundary. The site inspection undertaken by Bio Diverse Solutions on 18 January 2021 noted that one native tree ( <i>Eucalyptus staeri</i> ) located within the extraction area showed evidence of arboreal mammal utilisation. There were scratchings up

	the trunk leading to a small hollow (approx. 8x8cm) with some evidence of rubbing / chewing around the entrance (Bio Diverse Solutions, 2021). No scats were observed at the base of the tree.
	Given this observation, it is likely that the areas of remnant native vegetation adjacent to the Prescribed Premises boundary are being utilised by native fauna species (likely to be a WRP noting the number of records identified in the local area).
Aboriginal Heritage Sites	The Prescribed Premises boundary is located approximately 2.5km west of an Aboriginal Heritage Site known as "Marbelup Brook" (ID29673) which is listed as a mythological, natural feature site.
Groundwater	The Premises is located within the Proclaimed Albany Groundwater Area under the <i>Rights in Water and Irrigation Act 1914</i> with water quality between 500 to 1,000 milligrams per litre TDS.
	The DA issued by the City of Albany has a condition that requires that a minimum buffer of 2 metres of undisturbed soil profile between the base of the excavated area and the maximum groundwater level.



#### Figure 4: Distance to sensitive receptors

## 3.2 Risk ratings

Risk ratings have been assessed in accordance with the *Guideline: Risk Assessments* (DWER 2020) for each identified emission source and takes into account potential source-pathway and receptor linkages as identified in Section 3.1. Where linkages are in-complete they have not been considered further in the risk assessment.

Where the applicant has proposed mitigation measures/controls (as detailed in Section 3.1), these have been considered when determining the final risk rating. Where the delegated officer considers the applicant's proposed controls to be critical to maintaining an acceptable level of risk, these will be incorporated into the works approval as regulatory controls.

Additional regulatory controls may be imposed where the applicant's controls are not deemed sufficient. Where this is the case the need for additional controls will be documented and justified in Table 3.

Works approval W6619/2021/1 that accompanies this decision report authorises construction and time-limited operations. The conditions in the issued works approval, as outlined in Table 3 have been determined in accordance with *Guidance Statement: Setting Conditions* (DER 2015).

A registration is required following the time-limited operational phase authorised under the works approval to authorise emissions associated with the ongoing operation of the premises i.e. crushing and screening activities. A risk assessment for the operational phase has been included in this decision report, however licence conditions will not be finalised until the department assesses the licence application.

Table 3: Risk assessment of potential emissions and discharges from the premises during construction, time limited operations and operation

Risk events       Potential       Potential       Applicant         Sources / activities       Potential       pathways and       Receptors       Applicant					Risk rating <sup>1</sup> C = consequence L = likelihood	Applicant controls sufficient?	Conditions <sup>2</sup> of works approval	Justification for additional regulatory controls
Construction								
Placement of crushing and screening plant and associated equipment Vehicle movements on unsealed access roads Earthmoving and clearing of native vegetation activities to prepare site Construction of a 2- 4m bund along the southern and western boundary of the extraction area and parallel to any excavation areas; Construction of perimeter bunding to minimise stormwater entering the site	Dust	Pathway: Air / windborne dispersion Impact: Health and amenity of closest human receptors. Pathway: Air/windborne dispersion Impact: Ecosystem disturbance and impacts to adjacent remnant vegetation through dust deposition and threatened fauna species.	Closest residence is located 648m south of the nearest border of the Premises boundary. Remnant native vegetation located on site (within Lot 561, 20m from Premises boundary) and adjacent to the site (to the north, east, south and west of the Premises boundary). Threatened fauna species (WRP, forest red-tailed cockatoo, Carnaby's	Refer to Section 3.1	C = Minor L = Unlikely Medium Risk C = Minor L = Unlikely Medium Risk	Y	Condition 1 (Table 1): Design and Construction/installatio n requirements Condition 2: Submission of an Environmental Compliance Report	Minimal dust emissions may be generated from site preparation works including earthworks, equipment placement, vehicle movements, noise and perimeter bunding during the construction period. The limited scale of the construction works /placement that will occur over a short-term period coupled with the implementation of the Applicant's proposed controls are sufficient to mitigate any potential impacts on sensitive receptors from dust emissions. Additional regulatory controls are not required.

Risk events				Risk rating <sup>1</sup> C = consequence L = likelihood	Applicant controls sufficient?	Conditions <sup>2</sup> of works approval	Justification for additional regulatory controls	
Sources / activities	Potential emission	Potential pathways and impact	Receptors	Applicant controls				
			cockatoo) – closest record (WRP) located 857m southwest from Prescribed Premises boundary.					
	Noise	Pathway: Air / windborne dispersion Impact: Health and amenity of closest human receptors.	Closest residence is located 648m south of the nearest border of the Premises boundary.	Applicant has not specified controls for noise emissions during construction.	C = Minor L = Unlikely <b>Medium Risk</b>	N/A	Condition 1 (Table 1): Design and Construction/installatio n requirements Condition 2: Submission of an Environmental Compliance Report	Although the closest human receptors are situated within a prevailing wind direction, it is expected that receptors will not be significantly impacted by noise emissions noting the short term duration of the works and placement of the mobile crushing and screening plant equipment. The <i>Environmental Protection (Noise)</i> <i>Regulations 1997</i> (EP Noise Regulations) apply.
Operation (including	time-limited-ope	erations operations)						
Operation of the crushing and screening plant Unloading, loading and stockpiling of material Vehicle movements on unsealed surfaces Lift-off from stockpiles and/or stored product	Dust	Pathway: Air / windborne dispersion Impact: Health and amenity of closest human receptors.	Closest residence is located 648m south of the nearest border of the Premises boundary.	Refer to Section 3.1	C = Minor L = Unlikely <b>Medium Risk</b>	Y	<u>Condition 5 (Table</u> <u>2)</u> : Infrastructure and equipment requirements during Time Limited Operations Conditions 6 and 7: Dust management <u>Conditions 15 and</u> <u>16</u> : Time Limited operations reporting requirement.	Dust emissions are expected to be generated from the operation of the crushing and screening plant, vehicle movements, stockpiling and loading/unloading of material. Although the closest human receptors are situated within a prevailing wind direction, the Applicant's dust mitigation controls as outlined under Section 3.1 are likely to be sufficient for mitigating impacts to the nearby receptors. The applicant's controls will be conditioned within the works approval as regulatory controls. Compliance reporting during time limited operations will also ensure

Risk events					Risk rating <sup>1</sup> C = consequence L = likelihood	Applicant controls sufficient?	Conditions <sup>2</sup> of works approval	Justification for additional regulatory controls
Sources / activities	Potential emission	Potential pathways and impact	Receptors	Applicant controls				
								that relevant controls to mitigate dust emissions have been installed and are operational.
		Pathway: Air/windborne dispersion Impact: Ecosystem disturbance and impacts to adjacent remnant vegetation through dust deposition and threatened fauna species.	Remnant native vegetation located on site (within Lot 561, 20m from Premises boundary) and adjacent to the site (to the north, east, south and west of the Premises boundary). Threatened fauna species (WRP, forest red-tailed cockatoo, Carnaby's cockatoo) – closest record (WRP) located 857m southwest from Prescribed Premises boundary.		C = Moderate L = Unlikely Medium Risk	Y	<b>Condition 5 (Table</b> <b>2):</b> Infrastructure and equipment requirements during Time Limited Operations Conditions 6 and 7: Dust management <b>Conditions 15 and</b> <b>16</b> : Time Limited operations reporting requirement.	Remnant native vegetation is located within and directly adjacent to the Prescribed Premises boundary. The clearing of native vegetation is proposed within the extraction area as part of the project. A site inspection conducted by Bio Diverse Solutions (2021) on 18 January 2021 observed one of the trees proposed to be cleared had evidence of arboreal mammal utilization, which indicates that the remnant vegetation adjacent to the Premises is likely to be utiltised by native fauna that have been recorded in the local area. Dust emissions during site operations may result in onsite and offsite impacts to the degradation of remnant native vegetation and threatened conservation significant fauna that may utilise the area within and adjacent to the Premises. The Delegated Officer considers that the restricted stockpile heights that are to be retained on the excavation pit floor, covering of vehicle loads during transportation and wetting down of operational areas will ensure that dust emissions do not cross the Prescribed Premises boundary. These regulatory controls that have been included on the works approval and are likely to be adequate in mitigating dust emissions to reduce impacts to nearby receptors.

Risk events					Risk rating <sup>1</sup> C = consequence L = likelihood	Applicant controls sufficient?	Conditions <sup>2</sup> of works approval	Justification for additional regulatory controls
Sources / activities	Potential emission	Potential pathways and impact	Receptors	Applicant controls				
Operation of the crushing and screening plant Unloading, loading and stockpiling of material Vehicle movements on unsealed surfaces	Noise	Pathway: Air / windborne dispersion Impact: Health and amenity of closest human receptors.	Closest residence is located 648m south of the nearest border of the Premises boundary	Refer to Section 3.1	C = Moderate L = Unlikely <b>Medium Risk</b>	Ν	Condition 1 (Table 1): Design and Construction/installatio n requirements <u>Condition 5 (Table 2)</u> : Infrastructure and equipment requirements during Time Limited Operations <u>Condition 8:</u> Noise validation monitoring <u>Conditions 9 to 14:</u> Noise validation compliance reporting <u>Conditions 15 and</u> <u>16</u> : Time Limited operations reporting requirement.	The applicant has not conducted noise modelling to demonstrate that the operational noise levels can comply with the EP Noise Regulations at the nearest residential receptors. Noting that the distance to the closest human receptor (648m south of Premises) is within the afternoon prevailing wind direction, and that the buffer distance to the closest residence as recommended by the <i>Environmental Protection Authority</i> <i>Guidance Statement No. 3</i> will not be employed, noise verification monitoring is required to confirm compliance with the EP Noise Regulations whilst time limited operations are occurring. This will also verify whether the proposed 2-4m noise bund has assisted in complying with the EP Noise Regulations at the closest residences. A noise monitoring assessment for compliance at the residence during time limited operations will be placed on the works approval as a regulatory control. If compliance cannot be confirmed the activities will be ceased, adjusted, and additional noise mitigations implemented. The monitoring and changes to mitigation controls will be requirements of the works approval as regulatory controls.
		Pathway: Air/windborne dispersion Impact: Ecosystem disturbance and impacts to	Threatened fauna species (WRP, forest red-tailed cockatoo, Carnaby's cockatoo) – closest record		C = Moderate L = Unlikely Medium Risk	Y	Condition 5 (Table 2): Infrastructure and equipment requirements during Time Limited Operations Conditions 15 and	As discussed above, it is likely that the native vegetation that is within and surrounding the Prescribed Premises boundary contains habitat suitable for native fauna (potentially threatened) that have been recorded within the local area.

Risk events					Risk rating <sup>1</sup> C = consequence L = likelihood	Applicant controls sufficient?	Conditions <sup>2</sup> of works approval	Justification for additional regulatory controls
Sources / activities	Potential emission	Potential pathways and impact	Receptors	Applicant controls				
		adjacent remnant vegetation through dust deposition and threatened fauna species.	(WRP) located 857m southwest from Prescribed Premises boundary.				<u><b>16</b></u> : Time Limited operations reporting requirement.	The crushing and screening plant being located at the excavation pit floor and topsoil bunds that will be placed along the edge of the pits that will act as a noise bund are likely to mitigate noise emissions generated during operations. The Delegated Officer considers that these controls are expected to be sufficient to attenuate any potential noise emissions from the crushing and screening operation to local fauna that may utilize the native vegetation adjacent to the Prescribed Premises boundary.
Operation of the crushing and screening plant Stockpiling of material	Sediment laden stormwater	Pathway: Overland and stockpile runoff during high rainfall events. Impact: Increase of suspended solids into the environment causing ecosystem disturbance and impacts to surface water quality of nearby waterbodies.	Minor non- perennial tributary located 100m west of the Prescribed Premises boundary. 7 Mile Creek' conservation category wetland is mapped 275m north of the Prescribed Premises boundary.	Refer to Section 3.1	C = Minor L = Unlikely <b>Medium Risk</b>	Ν	Condition 1 (Table 1): Design and Construction/installatio n requirements Condition 5 (Table 2): Infrastructure and equipment requirements during Time Limited Operations Conditions 15 and 16: Time Limited operations reporting requirement.	It is noted that the topography of the land at the site slopes towards a minor non-perennial watercourse that is located approximately 100m west of the Premises boundary. This tributary drains into a conservation category wetland known as '7 Mile Creek'. Noting the close proximity of the crushing and screen operation to this surface water body, there is a risk of sedimentation runoff from the excavation areas to this waterbody, impacting upon the conservation category wetland during a high rainfall event. Given this, the Delegated Officer has determined that the stormwater management infrastructure controls proposed by the Applicant (if required) need to be committed to and conditioned on the works approval to ensure these environmental receptors are not impacted. The Applicant controls outlined under Section 3.1, which include installing bunding at the southern perimeter of

Risk events					Risk rating <sup>1</sup> C = consequence L = likelihood	Applicant controls sufficient?	Conditions <sup>2</sup> of works approval	Justification for additional regulatory controls
Sources / activities	Potential emission	Potential pathways and impact	Receptors	Applicant controls				
								each staged excavation pit to ensure potentially contaminated surface water does not mix with uncontaminated surface water as well as the site being graded to contain and direct potentially contaminated water generated from operational areas to a swale to act as a sediment pond are considered suitable for limiting sediment release/runoff.
								The Delegated Officer has considered the operator controls and considers them adequate to manage stormwater at the premises. The general provisions of the <i>Environmental Protection Act 1986</i> and the <i>Environmental Protection</i> <i>(Unauthorised Discharges) Regulations</i> 2004 are also applicable.
Hydrocarbon spills or leaks from vehicle and equipment use, refuelling or maintenance activities	Spills / leaks of hydrocarbons	Pathway: Overland runoff during high rainfall events. Leaching through soil profile to groundwater. Impact: Overland flow following a spill or leak event may impact on surface water bodies if not properly contained. Contamination of soils and deterioration of groundwater quality inhibiting	Minor non- perennial tributary located 100m west of the Prescribed Premises boundary. 7 Mile Creek' conservation category wetland is mapped 275m north of the Prescribed Premises boundary. Remnant native vegetation	Refer to Section 3.1	C = Slight L = Possible <b>Low Risk</b>	Y	N/A	Noting that there is no storage of hydrocarbons, chemicals or fuels stored on site, and the spill management procedures that will be implemented in the event of a spill or leak, the Delegated Officer has determined that the risk of hydrocarbon contamination to receptors is low. The stormwater management infrastructure proposed to be constructed as part of the operation will also contribute to managing the risk of hydrocarbon spills or leaks.

Risk events					Risk rating <sup>1</sup> C = consequence L = likelihood	Applicant controls sufficient?	Conditions <sup>2</sup> of works approval	Justification for additional regulatory controls
Sources / activities	Potential emission	Potential pathways and impact	Receptors	Applicant controls				
		the survival of adjacent remnant native vegetation.	located on site (within Lot 561, 20m from Premises boundary) and adjacent to the site (to the north, east, south and west of the Premises boundary).					

Note 1: Consequence ratings, likelihood ratings and risk descriptions are detailed in the Guideline: Risk Assessments (DWER 2020).

Note 2: Proposed applicant controls are depicted by standard text. **Bold and underline text** depicts additional regulatory controls imposed by department.

# 4. Consultation

Table 4 provides a summary of the consultation undertaken by the department.

#### Table 4: Consultation

Consultation method	Comments received	Department response		
Application advertised on the department's website on 24 November 2021.	No comments received.	N/A		
Local Government Authority advised of proposal on 24 November 2021.	<ul> <li>The City of Albany (the City) replied on 24 November 2021 providing the following:</li> <li>Confirmation that the Applicant has received Development Approval (DA) for the extractive industry and that an Extractive Industry Licence has been issued. Copies of both approvals were provided to DWER;</li> <li>No submissions were received from nearby residence during the public submission period for the DA application; and</li> <li>A list of the stakeholders that were consulted with during the public submission period for the DA application.</li> </ul>	Noted.		
Nearby residences advised of proposal on 6 December 2021.	<ul> <li>One public submission was received from a nearby resident on 29</li> <li>December 2021 regarding the works approval application. The main issues raised were in relation to the trees marked for removal for the proposed upgrades to Howell Road:</li> <li>The resident's property borders the eastern side of Howell Road, just north of the intersection of South Coast Highway and Howell Road North. The resident raised concern that the widening of the road would significantly narrow the border of the trees between the fence line and existing road which provides essential shelter for cattle inhabiting the property;</li> <li>The removal of the trees would increase the risk of the remaining trees being uprooting and falling on the resident's</li> </ul>	<ul> <li>The Delegated Officer notes the following in response to the matters raised in the public submission:</li> <li>As outlined under Section 2.4.3 of this report, the Applicant submitted an application for a clearing permit to clear 0.54 hectares for the purpose of road upgrades which is currently being assessed by NVRB (Clearing Permit CPS 9501/1). The clearing permit application was advertised on 9 December 2021 on the DWER website for a 14-day public submission period.</li> <li>The clearing of native vegetation is assessed by NVRB and any submissions received by the public related to the clearing are considered during the assessment. Noting the public submission period</li> </ul>		

	<ul> <li>fence as the trees render support to each other;</li> <li>Requested that the existing trees on the eastern side of Howell Road are retained;</li> <li>If Howell Road has to be upgraded, clearing should occur the Western side of Howell Road (Reserve side) rather than the Eastern side; and</li> <li>Requested to meet for an on- site inspection.</li> </ul>	closed on the 23 December 2021, the submission cannot be considered in the assessment as it was received outside of the period. Once a decision is made on the clearing permit, it will be advertised on the DWER website for a 21-day appeals period. This allows the public to appeal the decision made should they be opposed to it.
Applicant was provided with draft documents on 1 February 2022.	Comments from Applicant received on 28 February 2022. Comments are summarised in Appendix 1.	Refer to Appendix 1.

## 5. Conclusion

Based on the assessment in this decision report, the delegated officer has determined that a works approval will be granted, subject to conditions commensurate with the determined controls and necessary for administration and reporting requirements.

## References

- 1. Bio Diverse Solutions 2021, Applicant's response to request for further information dated 12 November 2021, DWER Reference A2063764.
- Bio Diverse Solutions 2021a, Cosla Pty Ltd Lots 6767 and 561 Howell Road, Marbelup, – Works Approval Application Supporting Document, dated 31 August 2021. Bio Diverse Solutions 2021, DWER Reference A2040760.
- 3. Bio Diverse Solutions 2022, Applicant's response to request for further information dated 28 February 2022, DWER Reference: DWERDT570301.
- City of Albany 2021, Proposed Industry Extractive (Gravel and Sand) at Lot 561 & Lot 6767 Howell Road Marbelup – Notice of Determination on application for development approval, dated 19 April 2021, DWER Reference A2065167.
- 5. City of Albany 2021a, Extractive Industry Licence Lot 561 & Lot 6767 Howell Road, Marbelup, dated 20 October 2021, DWER Reference A2070575.
- 6. Department of Environment Regulation (DER) 2015, *Guidance Statement: Setting Conditions*, Perth, Western Australia.
- 7. Department of Water and Environmental Regulation (DWER) 2020, *Guideline: Environmental Siting*, Perth, Western Australia.
- 8. DWER 2020, Guideline: Risk Assessments, Perth, Western Australia.

# Appendix 1: Summary of applicant's comments on risk assessment and draft conditions

Condition	Summary of applicant's comment	Department's response
Works Approval		
Condition 1 (Table 1): Design and construction/installation requirements for Stormwater Management Infrastructure.	The Applicant confirmed that the perimeter bunding that is proposed to be constructed along the southern border of each excavation pit is the sediment control structures referred to in Table 5 of the Environmental Assessment Report and Operations Plan.	Noted and updated Item 3 of Condition 1 (Table 1) with the additional information on the Stormwater Management Infrastructure that is proposed to be constructed at the Premises.
DWER requested that the Applicant confirm that the perimeter bunding is the sediment control structures referred to in Table 5 of the Environmental Assessment Report and Operations Plan.		
Condition 1 (Table 1): Design and construction/installation requirements for the Water truck.	The Applicant advised that the capacity of the water truck is 10,000L.	Updated Condition 1 (Table 1) of the Decision Report with the information provided by the Applicant accordingly.
DWER requested the Applicant advise of the water capacity of the water truck.		
Schedule 1, Figure 2: Stormwater management infrastructure at Premises DWER requested that the Applicant provide a plan that depicts the stormwater management infrastructure that will be constructed at the Premises.	The Applicant provided a design drawing and plan that depicts the stormwater and sediment control infrastructure that is proposed to be constructed at the Premises.	Noted and updated Figure 2 of Schedule 1 with a map depicting the location of the Stormwater Management Infrastructure at the Premises and a drawing detailing the design of the infrastructure was included in the works approval under Figure 3 of Schedule 2.

Condition	Summary of applicant's comment	Department's response
Decision Report		
Section 3.1.1 (Table 1) of the Decision Report: Emissions and Controls for dust emissions	The Applicant advised that the capacity of the water truck is 10,000L.	Updated Section 3.1.1 (Table 1) of the Decision Report with this information provided accordingly.
DWER requested the Applicant advise of the water capacity of the water truck.		
Section 3.1.1 (Table 1) of the Decision Report: Emissions and controls for sediment laden stormwater. DWER noted that section 7.4 of the Environmental Assessment Report and Operations Plan stated that perimeter bunding will be installed 'if required'. DWER noted that given the topography of the site slopes towards a minor non- perennial watercourse that drains to a conservation category wetland, more stringent controls are required for the management of sediment laden stormwater to ensure these environmental receptors are not impacted as a result of operations. DWER requested that the Applicant confirm which	The Applicant has confirmed that a stormwater retention area will be installed at the southern end of each staged extraction pit. Each pit will have a 2-4m high topsoil earth bund constructed along the southern edge of the staged extraction pit with a swale installed 0.5m in front of the bunding that will act as a sediment pond to collect stormwater and potential sediment runoff from the stockpiles and processing plant. The site will be graded along contours directing stormwater and sediment runoff to the swales inside the bunding. The Applicant has advised that the stormwater and sediment control structures that will be inspected following >10mm of rain are the stormwater and potential sediment runoff.	Noted and updated Section 2.3.2 of the Decision Report: Site operations process with the additional information provided from the Applicant regarding the stormwater management infrastructure that will be constructed and implemented to manage sediment stormwater laden at the Premises. The proposed controls for managing sediment stormwater laden outlined under Section 3.1.1 (Table 1) have also been updated to reflect the additional information provided.
stormwater management control will be implemented to manage contaminated stormwater runoff from stockpiles and the processing		

Condition	Summary of applicant's comment	Department's response
plant, either a collection basin or directed to a low point within the Prescribed Premises. DWER requested that the Applicant provide further details on the dimensions of the basin and construction methods/materials if a collection basin is proposed to be constructed and requested a plan that depicts the stormwater management infrastructure that will be constructed at the site.		
DWER requested that the Applicant confirm what stormwater and sediment control structures are being referred to when stating under Table 5 of the Environmental Assessment Report and Operations Plan that they will be inspected after >10mm of rain.		

# **Appendix 2: Application validation summary**

SECTION 1: APPLICATION SUMMARY						
Application type						
Works approval	$\boxtimes$					
Date application received		1 September 2021				
Applicant and Premises details						
Applicant name/s (full legal name/s	5)	Cosla Pty Ltd				
Premises name		N/A				
Premises location		Lot 6767 on Deposited Plan 167638 (Howell Road), Marbelup Lot 561 on Deposited Plan 256746 (Howell Road), Marbelup				
Local Government Authority		City of Albany				
Application documents						
HPCM file reference number:		DER2021/000506				
Key application documents (addition to application form):	onal	<ul> <li>Supporting Documents (DWERDT498667) including:</li> <li>Bio Diverse Solutions (2021) – Cosla Pty Ltd – Lots 6767 ad 561 Howell Road, Marbelup – Works Approval Application Supporting Documents, dated 31 August 2021; and</li> <li>Prescribed Premises Cosla Pty Ltd Works Approval Application –shapefiles.zip</li> </ul>				
Scope of application/assessmer	nt					
Summary of proposed activities or changes to existing operations.		The applicant is proposing to establish and operate a mobile crushing and screening plant for the extraction of sand material using a staged approach across a 19.9ha area. The extraction will occur in three stages comprising of multiple pits within each stage. Within these paddocks, one of the pits (average of 1ha in size) will be exposed/operated at any given time with rehabilitation occurring following the completion of extraction activities. The remaining area of the stage will be opened.				
Category number/s (activities that cause the premises to become prescribed premises) Table 1: Prescribed premises categories						

Prescribed premises category and description	Proposed production or design capacity	Proposed changes to the production or design capacity (amendments only)				
Category 70: Screening, etc. of material: premises on which material extracted from the ground is screened, washed, crushed, ground, milled, sized or separated	30,000 tonnes per annum (estimated/actual throughput) depending on demand. Less than 50,000 tonnes per annum (in times of high demand)	N/A				
Legislative context and other approvals						

Has the applicant referred, or do they intend to refer, their proposal to the EPA under Part IV of the EP Act as a significant proposal?	Yes □ No ⊠	Referral decision No: Managed under Part V Assessed under Part IV
Does the applicant hold any existing Part IV Ministerial Statements relevant to the application?	Yes □ No ⊠	Ministerial statement No: EPA Report No:
Has the proposal been referred and/or assessed under the EPBC Act?	Yes 🗆 No 🛛	Reference No:
Has the applicant demonstrated occupancy (proof of occupier status)?	Yes ⊠ No □	Certificate of title ⊠ General lease □ Expiry: Mining lease / tenement □ Expiry: Other evidence □ Expiry:
Has the applicant obtained all relevant planning approvals?	Yes 🛛 No 🗆 N/A 🗆	Applicant has obtained development approval and an Extractive Industry Licence.
Has the applicant applied for, or have an existing EP Act clearing permit in relation to this proposal?	Yes 🗆 No 🗆	The application form notes that approximately 30 trees are proposed to be cleared for the proposed activity. The applicant notes that they are exempt from requiring a clearing permit under Regulation 5, Item 19 of the <i>Environmental Protection</i> ( <i>Clearing of Native Vegetation</i> ) <i>Regulations 2004</i> .
Has the applicant applied for, or have an existing CAWS Act clearing licence in relation to this proposal?	Yes 🗆 No 🛛	N/A – Prescribed Premises area is not located within a CAWS area.
Has the applicant applied for, or have an existing RIWI Act licence or permit in relation to this proposal?	Yes □ No ⊠	Licence / permit not required.
Does the proposal involve a discharge of waste into a designated area (as defined in section 57 of the EP Act)?	Yes ⊠ No □	Name: Albany Type: Proclaimed Groundwater Area Has Regulatory Services (Water) been consulted? Yes  No  N/A

Is the Premises situated in a Public Drinking Water Source Area (PDWSA)?	Yes □ No ⊠	Name: N/A Priority: N/A Are the proposed activities/ landuse compatible with the PDWSA (refer to <u>WQPN 25</u> )? Yes □ No □ N/A ⊠
Is the Premises subject to any other Acts or subsidiary regulations (e.g. Dangerous Goods Safety Act 2004, Environmental Protection (Controlled Waste) Regulations 2004, State Agreement Act xxxx)	Yes □ No ⊠	N/A
Is the Premises within an Environmental Protection Policy (EPP) Area?	Yes □ No ⊠	N/A
Is the Premises subject to any EPP requirements?	Yes □ No ⊠	N/A
Is the Premises a known or suspected contaminated site under the <i>Contaminated Sites Act 2003</i> ?	Yes □ No ⊠	Classification: N/A Date of classification: N/A